

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 73-144 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Patent Abstracts of Japan vol. 0180, no. 44 herein referred to as Okabe.

Okabe discloses method for increasing the strength of a volume of soil, whereby it comprises at least one reinforcement step that comprises the following steps:

- a step for preparing receptacles for a reinforcement structure, in which a plurality of mutually spaced reinforcement holes are formed, said holes being arranged substantially vertically or inclined with respect to vertical direction (this feature cover all angels from 0-360 degrees with respect to the vertical) in the volume of soil to be strengthened (it is obvious that in the method in Okabe not only one hole is drilled but a plurality thereof);

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- a step for inserting the reinforcement structure, during which reinforcement elements are inserted in said reinforcement holes (in Okabe a "hollow rod" 1 is inserted into and left in the drilled hole, see for example figure 16);

- a step for locking the reinforcement structure, during which a synthetic locking substance that expands via chemical reaction is injected into said reinforcement holes, said substance being adapted to bond said reinforcement elements with the surrounding soil (a urethane foam resin is injected into the hole, said resin is then foamed and hardened).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick L. Lagman whose telephone number is 571-272-7043. The examiner can normally be reached on Monday-Friday 5:30AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frederick L. Lagman/
Primary Examiner
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FLL